INDEX

MICROBIOLOGY

Volume 34, 1965

INDEX

MICROBIOLOGY

Volume 34, 1965

(A Translation of Mikrobiologiya)

A

Agre, N. S. - 239, 346
Alekseeva, V. M. - 140
Aleksin, L. M. - 49
Alikhanyan, S. I. - 81, 380, 578, 633
Aliverdiev, A. A. - 221
Andreeva, I. V. - 88
Aseeva, I. V. - 19
Avdeeva, A. V. - 905
Averkiev, I. S. - 307

B

Babak, N. M. - 602, 756
Bagdasaryan, E. G. - 430
Baikova, L. A. - 841
Balashov, V. I. - 58
Ban'kovskaya, A. N. - 785
Ban'kovskii, A. I. - 785
Baturina, M. V. - 586
Bekhtereva, M. N. - 648, 669
Bekker, Z. É. - 568
Belaya, T. I - 930
Belov, Yu. M. - 161
Belyakova, L. A. - 980
Belykh, R. A. - 711
Bibikova, M. V. - 251
Biryuzova, V. I. - 895
Biryuzova, V. M. - 156
Bobkova, T. S. - 229
Bocharova, N. N. - 127
Bogdanova, N. P. - 539
Bogdanova, V. M. - 300
Borisova, T. G. - 568
Borisova, V. N. - 118
Borovik-Romanova, T. F. - 340
Byzhkova, V. M. - 343

C

Chaikovskaya, S. M. - 730
Chaplina, L. B. - 568
Cherkes, L. D. - 186
Chudina, V. I. - 14
Chumakova, R. I. - 961

D

Davydova, I. M. - 346
Dityatkin, S. Ya. - 704
Dmitrieva, S. V. - 568
Dobrovol'skaya, T. G. - 983
Doman, N. G. - 1, 329
Dorosinskii, L. M. - 917
Drabkova, V. G. - 943
Drakina, T. I. - 607
Dubrova, G. B. - 861

E

Egorova, L. A. - 630, 693, 865
El'piner, I. E. - 373
Erofeev, N. S. - 425, 937
Eroshin, V. K. - 769
Evko, E. I. - 445
Evreinova, T. N. - 346

F

Fadeeva, N. P. - 373
Fateeva, M. V. - 876
Fedenko, E. P. - 286
Fedorova, I. V. - 380
Fedorova, R. I. - 545
Feniksova, R. V. - 852
Feofilova, E. P. - 26
Filimonova, N. A. - 107
Filippova, M. S. - 467
Fish, A. M. - 961

G

Gabinskaya, K. N. - 597, 661
Galikeev, Kh. L. - 627
Gambaryan, M. E. - 949
Georgieva, I. - 759
Gerasimenko, L. M. - 741, 954
Gershanovich, V. N. - 564
Gesheva, R. - 452
Ginzburg, E. O. - 340
Gitel'zon, I. I. - 961
Glazer, V. M. - 505
Gofman, L. Kh. - 574
Gol'dat, S. Yu. - 542
Gol'dfarb, D. M. - 564, 905
Golomzik, A. I. - 396
Golovacheva, R. S. - 693
Golysheva, M. G. - 574
Goncharova, L. A. - 127
Gorlenko, V. M. - 274, 482
Goryunova, S. V. - 224, 319, 954
Gotovtseva, V. A. - 180, 857
Grabovskaya, O. Z. - 528
Grechushkina, N. N. - 166
Grishankova, E. V. - 574
Gulikova, O. M. - 499
Gusev, M. V. - 174, 408

I

Ierusalimskii, N. D. - 58, 597
Il'ina, T. S. - 578
Ilyaletdinov, A. - 809
Il'yashenko, B. N. - 704
Imshenetskii, A. A. - 255, 648, 969
Ipatova, A. P. - 846
Ivanov, I. D. - 161
Ivanov, V. I. - 396
Ivkov, V. G. - 140
Izrail'skii, V. P. - 974

K

Kalakutskii, L. V. - 132, 304
Kalmykova, G. Ya. - 369
Kalyaeva, É. S. - 578
Kalyuzhnaya, L. D. - 763
Kalyuzhnyi, M. Ya. - 800
Kameneva, S. V. - 578
Kaminir, L. B. - 140
Karasevich, Yu. N. - 586, 846
Karbanovich, A. I. - 91
Kasatkina, I. D. - 438
Kats, L. N. - 550, 735
Kazanskaya, T. B. - 648
Khaskin, I. G. - 617
Khmel', I. A. - 597, 661
Khokhlova, Yu. M. - 369
Khrzhanovskaya, V. É. - 669
Kirillova, N. F. - 132

Kislyakova, O. V. - 686
Klepikova, F. S. - 720
Kobrina, Yu. P. - 127
Kochetkova, G. V. - 638
Kokurina, N. A. - 890
Kolesnikova, I. G. - 841
Kolot, F. B. - 542
Kondrat'eva, E. N. - 499, 653
Kondrat'eva, T. F. - 192
Konova, I. V. - 452
Konovalov, S. A. - 833
Korn, M. Ya. - 400
Korneev, V. F. - 966
Korzhenko, V. P. - 653
Kosarev, M. G. - 985
Koshcheenko, K. A. - 210
Kosheleva, N. A. - 841
Kosmachev, A. E. - 369
Kotov, V. B. - 833
Kovaleva, L. A. - 539
Kovalevskaya, A. N. - 589
Koval'skii, V. V. - 340
Kovsharova, I. N. - 118
Kozachenko, V. I. - 386
Kozhukhar', I. G. - 763
Krasil'nikov, N. A. - 239
Krasil'nikova, E. N. - 199
Krasnopol'skaya, B. S. - 52
Kriss, A. E. - 971
Kriviskii, A. S. - 484, 711, 910
Krongaus, E. A. - 52
Kruglyak, E. B. - 118
Krylova, N. B. - 592
Kudryavtsev, V. I. - 475, 876
Kuksa, I. N. - 641, 818
Kulikova, A. K. - 852
Kulyash, Yu. V. - 196
Kupletskaya, M. V. - 789
Kushnarev, V. M. - 400
Kuznetsov, V. D. - 144
Kuznetsova, V. A. - 274
Kvaratskheliya, M. T. - 917

L

Lambina, V. A. - 69, 646
Leshchinskaya, I. B. - 680
Letunova, S. V. - 340
Levitov, M. M. - 180, 323, 528, 676, 857
Likhoded, V. G. - 923
Lisina, E. S. - 568
Litovchenko, E. T. - 763
Loginova, L. G. - 215, 693
Luk'yanovich, V. M. - 445
Lyalikova, N. N. - 279

M

Maiorova, V. I. - 837
Makarova, G. Ya. - 871
Maksimova, I. V. - 286, 413, 956
Maksimova, T. S. - 445
Malofeeva, I. V. - 653
Mardashev, S. R. - 37
Mar'enko, V. G. - 751
Margolina, G. L. - 621
Markianovich, E. M. - 297
Matselyukh, B. P. - 510
Medvedeva, G. A. - 976
Meshkov, A. N. - 528
Mikhailova, G. P. - 557
Mikhailova, G. R. - 386
Mindlin, S. Z. - 73
Mirchink, T. G. - 930
Mishustin, E. N. - 314, 425, 592, 751, 937
Mitronova, T. N. - 726
Mkrtumyan, N. M. - 81
Mokhova, E. N. - 353
Morozov, V. M. - 456
Muradov, M. - 63, 899
Murzaev, P. M. - 152

N

Nachev, L. - 452
Nadirova, I. M. - 983
Naidenova, L. P. - 357
Namestnikova, V. P. - 456, 539
Naumova, A. N. - 818
Nikitin, D. I. - 261, 425
Nikitina, É. S. - 895
Nikitina, K. A. - 166
Nikitina, T. N. - 876
Novichkova, A. I. - 656
Novikova, G. P. - 800

O

Odoevskaya, N. S. - 954
Orleanskii, V. - 641
Orlova, G. G. - 19
Orlova, I. G. - 521
Osnitskaya, L. K. - 14, 170, 490, 811
Ostrovskii, N. I. - 785
Ovcharov, A. K. - 833
Ovsyannikova, M. N. - 97

P

Padalko, T. B. - 923
Panichkina, T. B. - 720
Pavlenko, N. I. - 510
Pavlenko, V. F. - 265
Pavlova, I. B. - 550, 735
Penzikova, G. A. - 323, 676
Pertsovskaya, A. F. - 769
Petrushko, G. M. - 800
Pimenova, M. N. - 192, 413, 956
Pivovarova, É. V. - 144
Plankunov, V. K. - 449
Poglazova, M. N. - 871
Pokrovskaya, N. V. - 686
Pomortseva, N. V. - 404, 517
Popova, T. E. - 270
Potekhina, L. I. - 245
Pozmogova, I. N. - 630
Preobrazhenskaya, T. P. - 445
Pristavko, V. P. - 806
Proshlyakova, V. V. - 118
Prosnyakova, I. M. - 369
Prosvetova, N. K. - 890

R

Rabotnova, I. L. - 166, 310
Rautenshtein, Ya. I. - 63, 373, 648, 720, 899
Ravin, V. K. - 88
Rehacek, Z. - 304
Remezova, T. S. - 976
Revenko, T. A. - 589
Ristich, O. - 112
Rodina, A. G. - 487
Romanenko, V. I. - 291, 384
Romanova, A. K. - 1, 329
Rozanova, E. P. - 774
Rozenberg, L. M. - 876
Ruban, E. L. - 329
Rudavskii, V. P. - 617
Rudchenko, O. N. - 704
Rzhanova, G. N. - 224

S

Samokhvalov, G. I. - 542
Samosudova, E. V. - 471
Samtsevich, S. A. - 611
Sandrak, N. A. - 665
Sarukhanova, L. E. - 251
Savel'eva, N. D. - 780
Sergeeva, L. N. - 369
Shadrina, I. A. - 746
Shaforostova, L. D. - 58
Shalagina, A. I. - 785
Shaposhnikov, V. N. - 521
Sheikova, G. - 759
Shenin, Yu. D. - 539
Shestakov, S. V. - 174, 505
Shevchenko, A. A. - 510

Shevchenko, L. A. - 656
Shmyreva, T. V. - 52
Shomova, E. A. - 617
Shturm, L. D. - 774
Sitonite, Yu. P. - 161
Skorodumova, A. M. - 795
Skryabin, G. K. - 210, 392, 769
Skvortsova, I. N. - 204
Slavnina, G. P. - 103
Slezak, L. - 186
Sokolov, E. D. - 630
Sokolova, G. A. - 279
Sokolova, L. V. - 343
Sokovnina, Ya. M. - 37
Solov'ev, S. N. - 539
Solov'eva, K. A. - 517
Solov'eva, N. Ya. - 373
Stefanov, S. B. - 261
Stoletov, V. N. - 505
Stoyanov, N. - 759
Strugovshchikova, L. P. - 534
Sukhodolets, V. V. - 578
Suprun, T. P. - 461
Surorov, N. N. - 343
Sveshnikova, M. A. - 31

T

Tarasova, N. V. - 669
Tashpulatov, Zh. - 215
Tikhomirova, A. S. - 852
Tikhonenko, A. S. - 156, 704
Toropova, E. G. - 413
Trenina, G. A. - 251
Tret'yakova, A. N. - 420
Tsaplina, I. A. - 346
Tsibul'skaya, M. I. - 574
Tsyganov, V. A. - 539
Turkova, Z. A. - 568

U

Udalova, T. P. - 545
Ukholina, R. S. - 118
Ulasevich, E. I. - 611
Uspenskaya, V. É. - 8, 574

V

Vakulova, L. A. - 542
Vanyushin, B. F. - 890
Vasil'eva, Z. A. - 1
Vasil'kova, E. I. - 408
Vasina, T. A. - 574
Vavulo, F. P. - 91
Vedenina, I. Ya. - 827
Verkhovtseva, M. I. - 363
Vinogradova, K. A. - 19
Vlodavets, V. V. - 150
Vorob'eva, L. I. - 147, 890
Vorotnitskaya, N. E. - 353
Vostrov, I. S. - 425

W

Wu K'oyen - 69

Y

Yaroshenko, V. A. - 434
Yudina, O. D. - 180
Yurovskaya, E. M. - 434

Z

Zaitseva, G. N. - 499, 827
Zaitseva, Z. M. - 73
Zavarzin, G. A. - 1, 312
Zavil'gel'skii, G. B. - 910
Zenova, G. M. - 234, 699
Zharikova, G. G. - 726, 871
Zhdannikova, E. N. - 956
Zheltova, E. G. - 438
Zhevner, V. D. - 174
Zhil'tsova, G. K. - 255
Zhukova, R. A. - 539
Zhunaeva, V. V. - 720
Zoigur, E. S. - 127
Zuev, V. A. - 564
Zvyagintseva, I. S. - 392

MIKROBIOLOGIYA
EDITORIAL BOARD

V. G. Drobot'ko
N. D. Ierusalimskii
A. A. Imshenetskii
(Editor-in-Chief)
N. A. Krasil'nikov
S. I. Kuznetsov
M. M. Levitov
E. N. Mishustin
A. K. Panosyan
I. L. Rabotnova
Ya. I. Rautenshtein
(Assistant Editor)
Z. G. Razumovskaya
V. N. Shaposhnikov
I. Ya. Veselov

MICROBIOLOGY

A translation of **MIKROBIOLOGIYA**
a publication of the Academy of Sciences of the USSR

© 1965 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 34, Number 1 **January-February, 1965**

CONTENTS

	PAGE ENG.	RUSS.
On the Assimilation Pathways of Carbon of Monocarbonic Compounds by Budding Bacteria Hypomicrobium vulgare Stutz. Et Hartleb—N. G. Doman, Z. A. Vasil'eva, A. K. Romanova, and G. A. Zavarzin	1	3
Synthesis of Bacterioviridin and of Free Porphyrins by Green Bacteria as a Function of the Culture Conditions—V. É. Uspenskaya	8	12
The Role of Spectral Composition of Light and of its Intensity in the Growth of the Photosynthesizing Purple Sulfur Bacterium Chromatium vinosum—L. K. Osnitskaya and V. I. Chudina	14	19
Amino Acid Biosynthesis by Actinomycetes Isolated from Parmir Soils—I. V. Aseeva, K. A. Vinogradova, and G. G. Orlova	19	24
A Study of Metabolism of the Pigmented and Colorless Variants of Actinomyces longispororuber —E. P. Feofilova	26	32
Stability of the Specificity of Antagonism and Antibacterial Spectrum in Actinomycetes of the Roseus Section—M. A. Sveshnikova	31	39
Hydroxamic Acid Synthesis from Dicarboxylic Amino Acids and their Amides by Saccharomyces cerevisiae—S. R. Mardashev and Ya. M. Sokovnina	37	47
Vitamin Requirements of Yeasts of the Genus Candida—G. M. Shavlovskii and G. P. Ksheminskaya	42	53
Catalase and Peroxidase Activity of Mycobacteria—L. M. Aleksin	49	61
On Phases of Spore Germination of Various Cultures of Bacillus megaterium Var. Phosphaticum —E. A. Krongaus, T. V. Shmyreva, and B. S. Krasnopol'skaya	52	65
A New Principle for Regulating the Composition of the Medium in Continuous Cultivation of Microorganisms—N. D. Ierusalimskii, L. D. Shaforostova, and V. I. Balashov	58	73
The Effect of Nutrient Medium Composition on the Spontaneous Formation of Free Actinomycetes —Ya. I. Rautenshtein and M. Muradov	63	79
Transformation of Streptomycin Resistance in Saprophytic and Phytopathogenic Varieties of Pseudomonas fluorescens—V. A. Lambina and Wu K'o Yen	69	86
Production and Properties of Act. aureofaciens Mutants Synthesizing 6-Demethylchlorotetracycline—Z. M. Zaitseva and S. Z. Mindlin	73	91
Production of Action Spectrum Induced Mutations in Actinophages without Preliminary Intracellular Replication in the Phage Sensitive Strain—S. I. Alikhanyan and N. M. Mkrtumyan	81	101

Annual Subscription: $95 **Single Issue: $30** **Single Article: $15**

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever without permission of the publisher. Permission may be obtained from Consultants Bureau Enterprises, Inc., 227 West 17th Street, New York, N.Y. 10011, U.S.A.

CONTENTS (continued)

	PAGE	RUSS. PAGE
Effect of Ultraviolet-Irradiation on the Temperate Phage-Bacteria Complex in Various Stages After its Formation—V. K. Ravin and I. V. Andreeva	88	110
The Occurrence of Sporing Forms of Bacteria in Different Types of Soils—F. P. Vavulo and A. I. Karbanovich	91	114
Translocation of Streptomycin in Higher Plants—M. N. Ovsyannikova	97	121
Naphthalene-Oxidizing Bacteria in Ground Waters of Oil Beds—G. P. Slavnina	103	128
The Bacterioplankton and Bacterial Periphyton in Various Biotopes of Lake Syam —N. A. Filimonova	107	133
Development of Bacteria in Fertilized Ponds of the "Churug" Fishery (Yugoslavia)—O. Ristich	112	140
Production of Antibiotics Closely Related to Olivomycine by Various Actinomycetes Species —R. S. Ukholina, E. B. Kruglyak, V. N. Borisova, I. N. Kovsharova, and V. V. Proshlyakova	118	147
The Effect of Wild Yeasts on the Yield and Quality of Baker's Yeast—L. A. Goncharova, N. N. Bocharova, Yu. P. Kobrina and E. S. Zoigur	127	157
Germination of Actinomycetes Spores on Previously Used Media—L. V. Kalakutskii and N. F. Kirillova	132	163
Automatic Counting of Luminescent Microobjects—L. B. Kaminir, V. M. Alekseeva, and V. G. Ivkov	140	171
The Technique of Plating Out Freeze-Dried Spores of Some Antibiotic Producing Actinomycetes —V. D. Kuznetsov and É. V. Pivovarova	144	176
The Separation of Cobamides by Thin-Layer Chromatography—L. I. Vorob'eva	147	180
BOOK REVIEWS		
P. Gregory. The Microbiology of the Atmosphere—Reviewed by V. V. Vlodavets	150	184
G. A. Sokolova and G. I. Karavaiko. The Physiology and Geochemical Activity of Thiobacteria—Reviewed by P. M. Murzaev	152	185
Vladimir Aleksandrovich Engel'gardt (As He Enters His 71st Year)—A. S. Tikhonenko and V. M. Biryuzova	156	189

MIKROBIOLOGIYA
EDITORIAL BOARD

V. G. Drobot'ko
N. D. Ierusalimskii
A. A. Imshenetskii
(Editor-in-Chief)
N. A. Krasil'nikov
S. I. Kuznetsov
M. M. Levitov
E. N. Mishustin
A. K. Panosyan
I. L. Rabotnova
Ya. I. Rautenshtein
(Assistant Editor)
Z. G. Razumovskaya
V. N. Shaposhnikov
I. Ya. Veselov

MICROBIOLOGY

A translation of **MIKROBIOLOGIYA**
a publication of the Academy of Sciences of the USSR

© 1965 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 34, Number 2 **March-April, 1965**

CONTENTS

	PAGE ENG.	PAGE RUSS.
Nitrogen Fixation as a Hydrogen Accepting Process—I. D. Ivanov, Yu. P. Sitonite and Yu. M. Belov	161	193
Factors Underlying the Decrease in Oxidation-Reduction Potential in Cultures of Spore-Forming Aerobic Bacteria—N. N. Grechushkina, K. A. Nikitina and I. L. Rabotnova	166	200
Photosynthetic Development of the Purple Sulfur Bacteria Chromatium vinosum in Narrow Ranges of the Spectrum—L. K. Osnitskaya	170	204
Change in Composition and Content of Pigments of the Blue-Green Algae as a Function of the Spectral Composition of Light and Degree of Illumination—V. D. Zhevner, M. V. Gusev, and S. V. Shestakov	174	209
The Effect of Organic Acids on the Formation of Penicillin-Acylase by the Bacterium faecalis Alcaligenes—V. A. Gotovtseva, O. D. Yudina, and M. M. Levitov	180	216
L-Lysine Decarboxylase Production by Submerged Cultures of Bacterium cadaveris—L. D. Cherkes and I. Slezak	186	223
A Contribution on the Use of Acetate by Chlamydomonas globosa—M. N. Pimenova and T. F. Kondrat'eva	192	230
The Acetylation Process as a Function of Culture Age in Escherichia coli and Staphylococcus aureus—Yu. V. Kulyash	196	236
Homoenzymatic Lactic Acid Fermentation by Lactobacterium delbrückii as a Function of the Composition of the Medium—E. N. Krasil'nikova	199	239
Data on Products of the Vital Activity of Actinomyces subtropicus in Relation to Albomycin Production—I. N. Skvortsova	204	245
Deacetylation of Cortisone Acetate Using Molds—K. A. Koshcheenko and G. K. Skryabin	210	252
The Thermophilic Fungus Aspergillus fumigatus, Producing Active Cellulase—L. G. Loginova and Zh. Tashpulatov	215	258
On the Preservation of the Vital Activity of Microorganisms at Extremely Low Temperatures—A. A. Aliverdiev	221	265
Amino Acid Composition of Blue-Green Algae Phormidium uncinatum (Ag) Gom.—G. N. Rzhanova and S. V. Goryunova	224	268

Annual Subscription: $95 **Single Issue: $30** **Single Article: $15**

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever without permission of the publisher. Permission may be obtained from Consultants Bureau Enterprises, Inc., 227 West 17th Street, New York, N.Y. 10011, U.S.A.

CONTENTS (continued)

	PAGE ENG.	PAGE RUSS.
Carotenoid Pigments of Mycobacteria and Yeasts—T. S. Bobkova	229	273
Melanoid Pigments of Actinomycetes—G. M. Zenova	234	278
The Brown Group of Actinobifida chromogena n. sp.—N. A. Krasil'nikov and N. S. Agre	239	284
Streptosporangium rubrum n. sp. —A New Species of the Streptosporangium Genus —L. I. Potekhina	245	292
Production of Mutants with Oxidation Defects in Various Yeast Species —G. A. Trenina, M. V. Bibikova, and L. E. Sarukhanova	251	300
The Possibility of Identifying "Nucleoids" in Bacterial Cells as a Function of Age of the Culture—A. A. Imshenetskii and G. K. Zhil'tsova	255	305
Submicroscopic Bodies in Soil Suspensions—S. B. Stefanov and D. I. Nikitin	261	313
Occurrence of Molds in Peats, Soil, and Brown Coal—V. F. Pavlenko	265	318
The Requirement for Specific Nutrient Substances of the Pathogen of Cotton Wilt, Verticillium dahliae Kleb—T. E. Popova	270	324
Effect of Temperature on the Development of Microorganisms from Flooded Strata of the Romashkino Oil Field—V. A. Kuznetsova and V. M. Gorlenko	274	329
A Microbiological Characterization of some Ore Deposits in Central Kazakhstan —N. N. Lyalikova and G. A. Sokolova	279	335
The Effect of the Oxidation-Reduction Potential on the Development of Bacteria in Algal Cultures—I. V. Maksimova and E. P. Fedenko	286	344
A Microbiological Investigation of Lake Onega, Vygozero Reservoir, and the Lakes of the White Sea — Baltic Canal—V. I. Romanenko	291	350
A Planococcus Isolated from the Water of the Mediterranean—E. M. Markianovich	297	357
Distribution of Microflora in Rocks and Waters of Tertiary Deposits of Northern Part of Caspian Lowland (Furmanovo Area)—V. M. Bogdanova	300	361
The Detection of Cytochromes in Microbial Cells by the Benzidine Method —L. V. Kalakutskii and Z. Rehacek	304	366
SURVEY		
Principal Problems and Tasks in the Microbial Control of May Beetles—I. S. Averkiev	307	370
BOOK REVIEWS		
N. D. Ierusalimskii. Fundamentals of Microbe Physiology—Reviewed by I. L. Rabotnova	310	374
G. A. Sokolova and G. I. Karavaiko. Physiology and Geochemical Activity of Thiobacteria—Reviewed by G. A. Zavarzin	312	375
CHRONICLE		
The Eighth International Pedological Congress—E. N. Mishustin	314	377
Research on Microscopic Algae (Proceedings of Sixth Conference of Hungarian Biologists)—S. V. Goryunova	319	380

MIKROBIOLOGIYA
EDITORIAL BOARD

V. G. Drobot'ko
N. D. Ierusalimskii
A. A. Imshenetskii
(Editor-in-Chief)
N. A. Krasil'nikov
S. I. Kuznetsov
M. M. Levitov
E. N. Mishustin
A. K. Panosyan
I. L. Rabotnova
Ya. I. Rautenshtein
(Assistant Editor)
Z. G. Razumovskaya
V. N. Shaposhnikov
I. Ya. Veselov

MICROBIOLOGY

A translation of **MIKROBIOLOGIYA,**
a publication of the Academy of Sciences of the USSR

© 1966 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York, N.Y. 10011

Volume 34, Number 3 **May-June, 1965**

CONTENTS

	PAGE	RUSS. PAGE
Production of Enzyme Preparations from Mycelium of Actinomycetes fradiae by the use of Various Methods of Cell Destruction—M. M. Levitov and G. A. Penzikova	323	385
Products of Short-Term Chemosynthesis in Nitrosomonas europaea—A. K. Romanova, N. G. Doman, and E. L. Ruban	329	391
Correlation Between the Oxygen and Carbon-Dioxide Uptake in Peptone-Grown Heterotrophic Bacteria—V. I. Romanenko	334	397
Data on the Trace-Element Content of Microorganisms—V. V. Koval'skii, T. F. Borovik-Romanova, S. V. Letunova, and E. O Ginzburg	340	403
Deacetylation of Steroid Acetates Using Bac. megaterium—V. M. Byzhkova, L. V. Sokolova, and N. N. Suvorov	343	407
Effect of Temperature on Nucleic Acids of the Thermophilic and Mesophilic Variants of Micromonospora vulgaris—T. N. Evreinova, I. A. Tsaplina, N. S. Agre, and I. M. Davydova	346	411
A Study of the Cytochrome System of Torula utilis Based on the Distribution of the Reduction Levels Characteristic of Chain Members Under Steady-State Conditions—N. E. Vorotnitskaya and E. N. Mokhova	353	418
Amino-Acid Requirements of Thermophilic Bacteria—L. P. Naidenova	357	424
A Study of Cellulase Produced by Thermophilic Bacteria—M. I. Verkhovtseva	363	430
Conditions of Culturing and Isolation of an Antibiotic from the Thermophilic Actinomyces T-12/3—A. E. Kosmachev, Yu. M. Khokhlova, G. Ya. Kalmykova, I. M. Prosnyakova, and L. N. Sergeeva	369	437
Peculiarities of the Inducing Effect of Ultraviolet Rays and Ultrasonic Waves on a Lysogenic Culture of Actinomyces fradiae Strain 8004—N. Ya. Solov'eva, N. P. Fadeeva, Ya. I. Rautenshtein, and I. E. El'piner	373	442
The Production of Sarcolysin-Induced Mutations of Actinophages Lysing Strains of Actinomyces aureofaciens—S. I. Alikhanyan and I. V. Fedorova	380	450
A Study of Actinomyces aureofaciens Phages Differing in Morphology of Negative Colonies—V. I. Kozachenko and G. R. Mikhailova	386	456
Dissociation of Mycobacterium globiforme 193 and its Ability to Dehydrogenate Steroids—I. S. Zvyagintseva and G. K. Skryabin	392	461
Adaptation of Thiobacillus ferrooxidans to Increased Hydrogen Ion and Iron Concentrations—A. I. Golomzik and V. I. Ivanov	396	465
Effects of Various Tetrazolium Salts on Bacterial Reproduction—M. Ya. Korn and V. M. Kushnarev	400	469

Annual Subscription: $95 **Single Issue: $30** **Single Article: $15**

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever without permission of the publisher. Permission may be obtained from Consultants Bureau Enterprises, Inc., 227 West 17th Street, New York, N.Y. 10011, U.S.A.

CONTENTS (continued)

	PAGE	RUSS. PAGE
Pyocyanin Production on Hydrocarbon-Containing Media—N. V. Pomortseva	404	473
Changes in the Pigment Composition and Content of Blue-Green Algae in the Presence of Supplementary Sources of Carbon and Nitrogen—M. V. Gusev and E. I. Vasil'kova	408	477
Secretion of Organic Substances in the Growth of Green Algae on Mineral Media—I. V. Maksimova, E. G. Toropova, and M. N. Pimenova	413	483
Comparative Study of Nitrogen-Fixing Blue-Green Algae Isolated from Different Soils in the USSR—A. N. Tret'yakova	420	491
Role of Aerobiosis in the Formation of Humic Compounds—E. N. Mishustin, I. S. Vostrov, D. I. Nikitin, and N. S. Erofeev	425	497
Formation of Vitamin B_{12} by Soil Bacteria—E. G. Bagdasaryan	430	502
Selection of Microorganisms for the Oxidation of Certain Toxic Components of Sewage of Gas-Generating Stations—E. M. Yurovskaya and V. A. Yaroshenko	434	506
On Methods of Selecting Aspergillus niger Mutants with Altered Capacity to Synthesize Organic Acids—I. D. Kasatkina and E. G. Zheltova	438	511
Application of the Carbon Replica Method to the Electron Microscopic Study of the Surface of Actinomycete Spores—T. P. Preobrazhenskaya, T. S. Maksimova, V. M. Luk'yanovich, and E. I. Evko	445	519
Determination of K Vitamins in Gram-Positive Microorganisms—V. K. Plakunov	449	524
Secretion of Vitamin B_{12} by Actinomycetes During Growth on Solid Media of Different Composition—I. V. Konova, L. Nachev, and R. Gesheva	452	528
The Use of Fluorescence and Capillary-Fluorescence Analysis for the Primary Identification of Cultures of Actinomyces levoris—V. M. Morozov and V. P. Namestnikova	456	533
Preservation of Microscopic Fungi in Sterile Soil—T. P. Suprun	461	539
Preservation of a Culture of Bacillus brevis Var. G.-B.—M. S. Filippova	467	546
Lyophilization of Phytopathogenic Bacteria—E. V. Samosudova	471	551
On the Organization of the All-Union Collection of Microorganisms—V. I. Kudryavtsev	475	556
BOOK REVIEWS		
The Biology of Blue-Green Algae—Reviewed by M. V. Gorlenko	482	567
Molecular Biology of Bacterial Viruses—Reviewed by A. S. Kriviskii	484	564
CHRONICLE		
Problems of Microbiology at Symposia on Pollution of Bodies of Water, Held Under the Auspices of the World Health Organization—A. G. Rodina	487	567
Some Research in the Field of Biochemistry and Microbiology at the Scientific Institutes of England—L. K. Osnitskaya	490	569

MIKROBIOLOGIYA
EDITORIAL BOARD

V. G. Drobot'ko
N. D. Ierusalimskii
A. A. Imshenetskii
(Editor-in-Chief)
N. A. Krasil'nikov
S. I. Kuznetsov
M. M. Levitov
E. N. Mishustin
A. K. Panosyan
I. L. Rabotnova
Ya. I. Rautenshtein
(Assistant Editor)
Z. G. Razumovskaya
V. N. Shaposhnikov
I. Ya. Veselov

MICROBIOLOGY

A translation of **MIKROBIOLOGIYA,**
a publication of the Academy of Sciences of the USSR

© 1966 CONSULTANTS BUREAU, A DIVISION OF PLENUM PUBLISHING CORPORATION, 227 West 17th Street, New York, N. Y. 10011

Volume 34, Number 4 **July-August, 1965**

CONTENTS

	PAGE	RUSS. PAGE
Biochemical Changes in the Cells of Chromatium minutissimum nuder Under Photoautotrophic and Photoheterotrophic Conditions of Growth—G. N. Zaitseva, O. M. Gulikova, and E. N. Kondrat'eva	499	577
Content of Acid-Soluble Phosphorus Compounds in Different Variants of Bacillas brevis Var. G.-B.—V. N. Stoletov, V. M. Glazer, and S. V. Shestakov	505	584
Comparative Physicochemical Characterization of High-Polymer Deoxyribonucleic Acids from Actinomycetes and Breslau Bacillus—B. P. Matselyukh, A. A. Shevchenko, and N. I. Pavlenko	510	590
Formation of Aldehydes in the Oxidation of Heptane by Pseudomonas pyocyanea —N. V. Pomortseva and K. A. Solov'eva	517	598
Effect of Organic Acids on the Growth of Pseudomonas liquefaciens and Synthesis of Free Intracellular Amino Acids—V. N. Shaposhnikov and I. G. Orlova	521	602
Effect of Phosphorus on the Growth and Metabolism of Actinomyces fradiae 129 —A. N. Meshkov, O. Z. Grabovskaya, and M. M. Levitov	528	611
Flavin Production by Certain Species of Yeasts of the Genus Candida—L. P. Strugovshchikova	534	617
Violacin, A New Antibiotic—N. P. Bogdanova, L. A. Kovaleva, Yu. D. Shenin, S. N. Solov'ev, V. A. Tsyganov, R. A. Zhukova, and V. P. Namestnikova	539	623
Effect of Various Light Sources on Carotenoid Production by Penicillium sclerotiorum —F. B. Kolot, L. A. Vakulova, S. Yu. Gol'dat, and G. I. Samokhvalov	542	627
The Effect of Different Nutrient Compounds on the Formation of Gramicidin by Bacillus brevis Var. G.-B.—T. P. Udalova and R. I. Fedorova	545	631
Electron Microscopic and Cytochemical Study of Nuclear Elements in Bacillus cereus at Different Developmental Stages of the Culture—L. N. Kats and I. B. Pavlova	550	636
Cytological Study of Mixed Growth of Biochemically Deficient Variants of Actinomyces rimosus on Agar Medium—G. P. Mikhailova	557	643
Phage Reproduction in E. coli Spheroplasts Obtained with the Lytic Enzyme of the T2 Phage —D. M. Gol'dfarb, V. A. Zuev, and V. N. Gershanovich	564	648
Developmental Peculiarities of Molds Producing Various Antibiotic and Antiblastic Substances —Z. É. Bekker, S. V. Dmitrieva, T. G. Borisova, Z. A. Turkova, E. S. Lisina, and L. B. Chaplina	568	654
Preservation of Eremothecium ashbyii in the Active State—M. G. Golysheva, E. V. Grishankova, V. É. Uspenskaya, M. I. Tsibul'skaya, L. Kh. Gofman, and T. A. Vasina	574	661

Annual Subscription: $95 **Single Issue: $30** **Single Article: $15**

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever without permission of the publisher. Permission may be obtained from Consultants Bureau, A Division of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011, U.S.A.

CONTENTS (continued)

	PAGE	RUSS. PAGE
Characteristics of Escherichia coli K12 Mutants with a Defective Thymidylate-Synthesizing System—S. I. Alikhanyan, T. S. Il'ina, É. S. Kalyaeva, S. V. Kameneva, and V. V. Sukhodolets	578	666
Deadaptation of Yeasts (Candida tropicalis) Adapted to L-Arabinose—Yu. N. Karasevich and M. V. Baturina	586	676
Variation of Escherichia coli in Continuous Cultivation in Bile-Containing Media —A. N. Kovalevskaya and T. A. Revenko	589	680
Molybdenum Requirement of Free-Living Nitrogen-Fixing Bacteria—E. N. Mishustin and N. B. Krylova	592	683
Growth and Nitrogen Fixation of Azotobacter vinelandii Under Different Aeration Conditions —I. A. Khmel', K. N. Gabinskaya, and N. D. Ierusalemskii	597	689
Azotobacter chroococcum and Azotobacter galophilum in Saline Soils of the Food-Plain of the River Prut—N. M. Babak	602	695
Plant Growth Stimulators Produced by Taphrina Fungi—T. I. Drakina	607	702
Microflora of Hydroponic Cucumber Culture—S. A. Samtsevich and E. I. Ulasevich	611	707
On the Fungicidal Activity of Certain Aromatic Derivatives of Trichloroacetamide —E. A. Shomova, V. P. Rudavskii, and I. G. Khaskin	617	715
A Microbiological Characterization of Cherepovets Reservoir in its First Year —G. L. Margolina	621	720
Biochemical Activity of Extracts Prepared from Nonpathogenic Fungi Isolated from the Atmospheric Air—Kh. L. Galikeev	627	727
Single Cell Isolation with Simplified Capillary Device—E. D. Sokolov, L. A. Egorova, and I. N. Pozmogova	630	730
Johan Gregor Mendel—S. I. Alikhanyan	633	733
BOOK REVIEW		
V. S. Dmitrieva and S. M. Semenov. Microbiological Assay of the Activity of Antibiotic Preparations—G. V. Kochetkova	638	740
CHRONICLE		
Development of Scientific Research on Nitrogen-Fixing Blue-Green Algae and Their Practical Use in Agriculture—I. N. Kuksa and V. Orleanskii	641	743
The Fourth Congress of the Hungarian Microbiological Society—V. A. Lambina	646	747
Pavel Andreevich Agatov (in Commemoration of His Sixtieth Birthday)—A. A. Imshenetskii, Ya. I. Rautenshtein, T. B. Kazanskaya, and M. N. Bekhtereva	648	749

MIKROBIOLOGIYA
EDITORIAL BOARD

V. G. Drobot'ko
N. D. Ierusalimskii
A. A. Imshenetskii (Editor-in-Chief)
N. A. Krasil'nikov
S. I. Kuznetsov
M. M. Levitov
E. N. Mishustin
A. K. Panosyan
I. L. Rabotnova
Ya. I. Rautenshtein (Assistant Editor)
Z. G. Razumovskaya
V. N. Shaposhnikov
I. Ya. Veselov

MICROBIOLOGY

A translation of **MIKROBIOLOGIYA,**
a publication of the Academy of Sciences of the USSR

© 1966 CONSULTANTS BUREAU, A DIVISION OF PLENUM PUBLISHING CORPORATION, 227 West 17th Street, New York, N. Y. 10011

Volume 34, Number 5 **September-October, 1965**

CONTENTS

	PAGE	RUSS. PAGE
Amino Acid Composition of Photosynthesizing Bacteria—I. V. Malofeeva, V. P. Korzhenko, and E. N. Kondrat'eva	653	753
Effect of Antibiotics that Inhibit Protein Synthesis on the Free Amino Acid Pool in Cells of Endomyces magnusii—L. A. Shevchenko and A. I. Novichkova	656	757
Effect of Aeration on the Growth of Azotobacter vinelandii on Various Carbon Sources —I. A. Khmel' and K. N. Gabinskaya	661	763
On the Specificity of the Influence of the "Extracellular Factor" on the Fixation of Atmospheric Nitrogen by Azotobacter—N. A. Sandrak	665	768
Formation of Alcohols and Acids from Glycerin by Actinomyces violaceus, Strain 719 —M. N. Bekhtereva, N. V. Tarasova, and V. É. Khrzhanovskaya	669	773
Dehydrogenase Activity in a Culture of Actinomyces fradiae—G. A. Penzikova and M. M. Levitov	676	781
Investigation of the Phosphodiesterase Activity of Saprophytic Bacteria—I. B. Leshchinskaya	680	786
Mechanism of the Stimulating Effect of Calcium Carbonate on the Glucose Oxidase and Catalase Activity of Penicillium vitale—N. V. Pokrovskaya and O. V. Kislyakova	686	793
Ecology and Systematics of Aerobic Obligate-Thermophilic Bacteria Isolated from Thermal Localities on Mount Yangan-Tau and Kunashir Isle of the Kuril Chain —R. S. Golovacheva, L. A. Egorova, and L. G. Loginova	693	801
Actinomycetes of the Chromogenic Group—G. M. Zenova	699	808
Biological Characteristics of Small Enteric Phages Containing DNA—B. N. Il'yashenko, A. S. Tikhonenko, S. Ya. Dityatkin, and O. N. Rudchenko	704	814
Lysogeny of Escherichia coli Strains 600 and SK—Host Bacteria for Phage s_d—R. A. Belykh and A. S. Krivishii	711	820
Characteristics of a Novobiocin-Producing Lysogenic Culture of Actinomyces spheroides Strain 35 and its Temperate Actinophage—Ya. I. Rautenshtein, F. S. Klepikova, V. V. Zhunaeva, and T. B. Panichkina	720	828
A Method for Obtaining Spores from the Four Forms of Bacillus brevis var. G.-B. —T. N. Mitronova and G. G. Zharikova	726	835
Relationship Between Penicillin Sensitivity of Penicillinase-Producing Strains of Bac. subtilis and Rate of Spore Germination—S. M. Chaikovskaya	730	840
An Investigation of the Effect of Enzymes on the Bacterial Cell with the Optical and Electron Microscopes—L. N. Kats and I. B. Pavlova	735	845

Annual Subscription: $95 **Single Issue: $30** **Single Article: $15**

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever without permission of the publisher. Permission may be obtained from Consultants Bureau, A Division of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011, U.S.A.

CONTENTS (continued)

	PAGE	RUSS. PAGE
Morphological and Cytological Changes in Some Algae Produced by Colchicine, Chlortetracycline and Trypaflavine—L. M. Gerasimenko	741	851
Ultrastructure of L-Form of Proteus vulgaris—I. A. Shadrina	746	858
The Effect of an Azotobacter chroococcum Culture on the Yield of Agricultural Plants —E. N. Mishustin and V. G. Mar'enko	751	863
Importance of Carbon Source in Medium for the Count of Azotobacter in Saline Soils of Moldavia—N. M. Babak	756	868
Antagonistic Properties of Actinomycetes Isolated from the Rhizosphere of Various Plants —G. Sheikova, I. Georgieva, and N. Stoyanov	759	871
The Actinomyces Flora of the Root System of Apple Trees—E. T. Litovchenko, L. D. Kalyuzhnaya, and I. G. Kozhukhar'	763	876
Growth of Mucorales on Paraffin—V. K. Eroshin, A. F. Pertsovskaya, and G. K. Skryabin	769	883
Microflora of Shor-Su Ozokerite Deposits—E. P. Rozanova and L. D. Shturm	774	888
A Method of Counting Manganese-Oxidizing Leptothrix—N. D. Savel'eva	780	895
Obtention of Classical Ergot Alkaloids in a Saprophytic Culture of Claviceps purpurea Tul. —A. I. Shalagina, N. I. Ostrovskii, A. N. Ban'kovskaya, and A. I. Ban'kovskii	785	901
Effect of Aeration on the Development and Gramicidin S Formation in a Culture of Bacillus brevis Var. G.-B.—M. V. Kupletskaya	789	905
Fat-Hydrolyzing Yeasts—A. M. Skorodumova	795	912
Flocculation of Candida utilis and Candida tropicalis Yeast Cells and its Relation to Flotation—M. Ya. Kalyuzhnyi, G. M. Petrushko, and G. P. Novikova	800	918
Role of Entomogenous Bacteria of the Intestinal Flora in the Microbiological Control of Insect Pests—V. P. Pristavko	806	925
CRITICISM		
V. V. Ponomareva. Theory of the Podzol-formation Process. Biochemical aspects. —Reviewed by A. Ilyaletdinov	809	929
CHRONICLES		
The Sixth International Biochemical Congress—L. K. Osnitskaya	811	931
Results of the Conference on the Study of the Symbiotic Fixation of Atmospheric Nitrogen and the Practical Application of Nitragin in Agriculture—A. N. Naumova and I. N. Kuksa	818	937
Vladimir Dmitrievich Timakov (On His Sixtieth Birthday)	823	941

MIKROBIOLOGIYA
EDITORIAL BOARD

V. G. Drobot'ko
N. D. Ierusalimskii
A. A. Imshenetskii
(Editor-in-Chief)
N. A. Krasil'nikov
S. I. Kuznetsov
M. M. Levitov
E. N. Mishustin
A. K. Panosyan
I. L. Rabotnova
Ya. I. Rautenshtein
(Assistant Editor)
Z. G. Razumovskaya
V. N. Shaposhnikov
I. Ya. Veselov

MICROBIOLOGY

A translation of **MIKROBIOLOGIYA,**
a publication of the Academy of Sciences of the USSR

© 1966 CONSULTANTS BUREAU, A DIVISION OF PLENUM PUBLISHING CORPORATION, 227 West 17th Street, New York, N. Y. 10011

Volume 34, Number 6 **November-December, 1965**

CONTENTS

	PAGE	RUSS. PAGE
Electrophoretic Study of Cytoplasmic Proteins of Azotobacter vinelandii in the Process of Synchronous Development—G. N. Zaitseva and I. Ya. Vedenina	827	945
Study of the Free Intracellular Amino Acids and Amino Acid Composition of Protein in Strains of Aspergillus usamii—V. B. Kotov, S. A. Konovalov, and A. K. Ovcharov	833	952
Composition of Polysaccharides in Chainia—V. I. Maiorova	837	956
Biosynthesis of α-Ketoglutaric Acid by Pseudomonas fluorescens 3B—N. A. Kosheleva, I. G. Kolesnikova, and L. A. Baikova	841	960
Rate of Conversion of L-Arabinose by Candida tropicalis in Various Media —Yu. N. Karasevich and A. P. Ipatova	846	966
Mechanism of Glucose Inhibition of Induced Amylase Synthesis by Aspergillus oryzae —R. V. Feniksova, A. S. Tikhomirova, and A. K. Kulikova	852	972
Influence of Tryptophan on Penicillin Acylase Formation in Bacterium faecalis Alcaligenes No. 415—V. A. Gotovtseva and M. M. Levitov	857	978
The Effect of Chlortetracycline on Bacteria at Different Temperatures—G. B. Dubrova	861	983
Development of Obligate Thermophiles at 55-70°C—L. A. Egorova	865	988
Nucleotides of Dissociation Forms of Bacillus brevis var. G.-B.—G. G. Zharikova, M. N. Poglazova, and G. Ya. Makarova	871	995
Behavior of Various Groups of Yeasts Toward Hydrocarbons of Petroleum Fractions —V. I. Kudryavtsev, M. V. Fateeva, T. N. Nikitina, and L. M. Rozenberg	876	999
Comparative Physiological and Biochemical Study of Mycobacterium luteum and Propionibacterium shermanii—L. I. Vorob'eva, B. F. Vanyushin, N. A. Kokurina, and N. K. Prosvetova	880	1003
Luminescent Microscopic Study of Early Stages of Development in Proteus vulgaris —É. S. Nikitina and V. I. Biryuzova	885	1008
Isolation and Characterization of Actinophages of the Polylysogenic Actinomyces levoris 2638—Ya. I. Rautenshtein and M. Muradov	889	1011
Infection of Lysozyme Spheroplasts with Intact and Destroyed C^{14}-Tyrosine-Labeled Phage T2—D. M. Gol'dfarb and A. V. Avdeeva	895	1019
The Molecular Nature of the Nonlethal, Nonhereditary Injuries to Bacteriophages Due to Ultraviolet Irradiation—G. B. Zavil'gel'skii and A. S. Kriviskii	900	1025
Bacteriophage as the Cause of Production of Nongerminating Spores in the Submerged Cultivation of Bacillus megaterium—M. T. Kvaratskheliya and L. M. Dorosinskii	907	1034

Annual Subscription: $95 **Single Issue: $30** **Single Article: $15**

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever without permission of the publisher. Permission may be obtained from Consultants Bureau, A Division of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011, U.S.A.

CONTENTS (continued)

	PAGE	RUSS. PAGE
Effect of Acriflavine on Frequency of Transfer of Colicinogenic Factor I in Salmonella typhimurium—V. G. Likhoded and T. B. Padalko	913	1041
Mycoflora of the Tropical Soils of Guinea, and Its Biological Properties—T. G. Mirchink and T. I. Belaya	920	1049
Elimination of the Nitrogen Deficiency in Soil by Using Straw as an Organic Fertilizer—E. N. Mishustin and N. S. Erofeev	927	1056
Dynamics of the Bacterial Number, Generation Time, and Production of Bacteria in the Water of Red Lake (Punnus Jarvi)—V. G. Drabkova	933	1063
Method of Determining the Generation Time of Microorganisms in Benthic Sediments—M. E. Gambaryan	939	1070
Some Methods for the Purification of Blue-Green Algae from Concomitant Bacteria—S. V. Goryunova, N. S. Odoevskaya, and L. M. Gerasimenko	944	1077
Identification of Living and Dead Cells in Cultures of Protococcal Algae—M. N. Pimenova, E. N. Zhdannikova, and I. V. Maksimova	946	1080
An Apparatus for Investigating the Dynamic Characteristics of Metabolism in the Continuous Cultivation of Microorganisms—I. I. Gitel'zon, A. M. Fish, and R. I. Chumakova	951	1086
A Dosing Device with a Sterilizing System for Microbiological Inoculations—V. F. Korneev	956	1092
BOOK REVIEWS		
M. P. Starr (Ed.). Global Impacts of Microbiology—Reviewed by A. M. Imshenitskii	959	1095
A. G. Rodina. Methods of Water Microbiology. A Practical Guide—Reviewed by A. E. Kriss	961	1096
A. L. Shcherbin-Parfenko. Bacterial Diseases of Forest Trees—Reviewed by V. P. Izrail'skii	964	1098
CHRONICLES		
A Symposium—G. A. Medvedeva and T. S. Remezova	966	1100
Scientific Conference at the Institute of Microbiology—L. A. Belyakova	970	1103
Meeting of the Section on the Taxonomy and Ecology of Microorganisms—I. M. Nadirova and T. G. Dobrovol'skaya	973	1105
The Work of the Rostov-on-Don Regional Department of the All-Union Microbiological Society—M. G. Kosarev	975	1107
INDEX		
Author Index, Volume 34, 1965	979	
Tables of Contents, Volume 34, 1965	982	